cyclophosphamide pharmacology

[PDF] retail price of singulair
[PDF] pharmacology of olmesartan medoxomil
[PDF] sildenafil generico de 50 mg
[PDF] generic zyrtec d ingredients
[PDF] baclofen polpharma co to za lek
[PDF] what is the generic of singulair
[PDF] generic zoloft walgreens

Cyclophosphamide is an alkylating agent of the nitrogen mustard type. Pharmacy and pharmacology portal Medicine portal. ALDHs protect these actively proliferating tissues against toxic effects of phosphoramide mustard and acrolein by converting aldophosphamide to carboxycyclophosphamide that does not give rise to the toxic metabolites phosphoramide mustard and acrolein. Seventh Cain Memorial Award lecture". Journal of Clinical Oncology. The Complete Drug Reference". International Drug Price Indicator Guide. Cyclophosphamide was approved for medical use in the United States in Additional relative contraindications to the use of cyclophosphamide include lactation , active infection, neutropenia or bladder toxicity. Oral cyclophosphamide is rapidly absorbed and then converted by mixed-function oxidase enzymes cytochrome P system in the liver to active metabolites. Once in the cells, the prodrug was enzymatically converted into the active, toxic form. As reported by O. Cyclophosphamide is carcinogenic and may increase the risk of developing lymphomas , leukemia , skin cancer , transitional cell carcinoma of the bladder or other malignancies. Nat Rev Clin Oncol. This effect is reinforced by the phosphorylating properties of the drug. When AML occurs, it is often preceded by a myelodysplastic syndrome phase, before developing into overt acute leukemia. Neutropenia or lymphoma arising secondary to cyclophosphamide usage can predispose people to a variety of bacterial , fungal and opportunistic infections.Jump to Pharmacology - Pharmacology. Indication. Cyclophosphamide is indicated for the treatment of malignant lymphomas, multiple myeloma, leukemias, mycosis fungoides (advanced disease), neuroblastoma (disseminated disease), adenocarcinoma of the ovary, retinoblastoma, and carcinoma of the breast.?Identification ?Interactions. Precursor of an alkylating nitrogen mustard antineoplastic and immunosuppressive agent that must be activated in the LIVER to form the active aldophosphamide. Cyclophosphamide has been used in the treatment of LYMPHOMA and LEUKEMIA. Its side effect, ALOPECIA, has been used for defleecing wvcybersafety.comm CID?: ? Alkylation; Allopurinol/pharmacology; Allopurinol/therapeutic use; Blood Proteins; Carbon Isotopes; Cyclophosphamide/administration & dosage; Cyclophosphamide/blood; Cyclophosphamide/metabolism*; Cyclophosphamide/therapeutic use; Cyclophosphamide/urine; Feces/analysis; Half-Life; Humans; Kidney Failure. General pharmacology: Cyclophosphamide is a synthetic anticancer drug. The chemical name is 2-[Bis (2-chloroethyl) amino] tetrahydro-2H-1, 3, 2-oxazaphosphorine 2-oxide monohydrate, molecular formula is C7H15Cl2N2O2P and molecular weight is It is rapidly absorbed from the gastrointestinal tract after oral ?General pharmacology ?Dosage of cyclophosphamide ?Side effects. Pharmacology. Metabolism: liver; CYP 2B6 (activation), 3A4 (inactivation) substrate; Info: prodrug converted to active alkylating metabolites. Excretion: urine (% unchanged); Half-life: h. Subclass: DMARDs 1: Immunosuppressives; Alkylating Agents 1: Nitrogen Mustards. Mechanism of Action alkylates and. This may result in increased toxicity [see CLINICAL PHARMACOLOGY]. Monitor patients with severe renal impairment (CrCl =10 mL/min to 24 mL/min) for signs and symptoms of toxicity. Cyclophosphamide and its metabolites are dialyzable although there are probably quantitative differences depending upon the dialysis. The human pharmacology of Cyclophosphamide was investigated in 26 patients who received cyclophosphamide-. I4C in doses of 6 to 80 mg/kg i.v. Levels of the intact drug in plasma and urine and excretion of 14C label in breath and stools were determined by liquid scintillation counting. Plasma and urine alkylating. Clinical Pharmacology and Toxicology of Cyclophosphamide: Emphasis on Use in Rheumatic Diseases. By Joel Kovarsky. N UMEROUS cytotoxic drugs are available for the treatment of severe forms of rheu- matic diseases-'. Biologic effects of alkylating agents were first reported in ,4 and over the years, these agents. Aug 31, - Clinical Pharmacology of Cyclophosphamide and Ifosfamide. Jing Zhang, Quan Tian and Shu-Feng Zhou. *. Department of Pharmacy, Faculty of Science, National University of Singapore, Singapore. Abstract: The oxazaphosphorine cyclophosphamide (CPA) and ifosfamide (IFO) are two commonly used. Cyclophosphamide (Cytoxan; Cy) is an alkylating agent with cytotoxic and immunosuppressive activities. The parent compound is inactive in vitro and exerts its biologic activity through metabolites, mainly phosphoramide mustard generated by hepatic microsomal enzymes. The exact mode of cytotoxic

and.